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## Acute Coronary Syndromes

## RISK STRATIFICATION FOR CARDIOVASCULAR EVENTS IN THE IMPROVE-IT TRIAL

Moderated Poster Contributions

Acute Coronary Syndromes Moderated Poster Theater, Poster Hall B1

Saturday, March 14, 2015, 10:30 a.m.-10:40 a.m.

Session Title: The Complex Landscape of Acute Coronary Syndromes

Abstract Category: 2. Acute Coronary Syndromes: Clinical

Presentation Number: 1125M-07

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**Background:** IMPROVE-IT is a randomized, double-blind trial evaluating whether the addition of ezetimibe (EZE) to simvastatin (simva) improves CV outcomes over statin monotherapy in post-ACS patients. The REACH score predicts secondary CV events in outpatients with known CV disease (Am J Med 2012;125). We hypothesized that the REACH score will identify a post-ACS population at highest risk for CV events in the IMPROVE IT trial and define a subgroup that derives greatest benefit from the addition of EZE to a statin.

**Methods:** 18,144 patients stabilized after ACS were randomized to EZE/simva 10/40mg or simva 40mg. The primary endpoint was the composite of CV death, major coronary event (MCE) or stroke. The predictive ability of the baseline REACH score for the primary endpoint was assessed in aggregate and will be evaluated by treatment pending final database lock and unblinding in October.

**Results:** The median REACH score was 14 (12, 15; Fig 1a). The risk of CV death, MCE or stroke was significantly higher in all quartiles compared to Q1 (Q2 HR 1.09, 1.02-1.18; Q3 HR 1.26, 1.15-1.38; Q4 HR 1.63, 1.51-1.75; Fig 1b). By treatment analysis is pending unblinding.

**Conclusion:** his pre-specified preliminary analysis of the IMPROVE-IT trial found that the REACH score, validated in a stable population, also predicts long-term CV outcomes in post-ACS patients in a graded fashion. Future analysis will address whether the REACH score identifies a subgroup experiencing greatest benefit from the addition of EZE to a statin.

Figure 1a: Risk Score Distribution

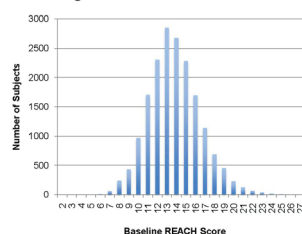


Figure 1b: Hazard by Risk Score Quartile

